CLAIMS

1. An yellow ink for inkjet recording, which comprises:

an aqueous medium; and

at least two dyes, wherein the at least two dyes each independently has: a λmax of from 390 nm to 470 nm; a ratio of I(λmax + 70 nm) to I(λmax) of 0.4 or less, wherein I(λmax + 70 nm) represents an absorbance at a wavelength of λmax + 70 nm and I(λmax) represents an absorbance at a wavelength of λmax; and an oxidation potential higher than 1.0 V versus SCE,

wherein at least one of the at least two dyes is a dye represented by formula (Y1):

$$(A_{11}-N=N-B_{11})n-L$$

wherein

A_{11} and B_{11} each independently represents a heterocyclic group that may be substituted; n is 1 or 2; and L represents a hydrogen atom, a monovalent substituent, a single bond, or a divalent linking group,

provided that when n is 1, L is a hydrogen atom or a monovalent substituent, and A_{11} and B_{11} are both monovalent heterocyclic groups; and when n is 2, L is a single bond or a divalent linking group, A_{11} is a monovalent heterocyclic group, and B_{11} is a divalent heterocyclic group.

2. The yellow ink for inkjet recording according to claim 1, wherein at least one of the at least two dyes is a dye represented by formula (Y2) or (Y3):

(Y2) P-N=N-Q

wherein P represents an aryl group that may be substituted; and Q represents a heterocyclic group that may be substituted,

(Y3) X-N=N-Y

wherein X and Y each represents an aryl group that may be substituted.

3. The yellow ink for inkjet recording according to claim 1 or 2, wherein a content of the dye represented by formula (Y1) is 50 % or more by weight with respect to total amount of all dyes in the yellow ink.

4. A black ink for inkjet recording, which comprises:

an aqueous medium; and

at least two dyes, wherein the at least two dyes each independently has: a λmax of from 500 nm to 700 nm; and a half-value width of 100 nm or more in an absorption spectrum of a diluted solution, the absorption spectrum being standardized to have an absorbance of 1.0 at the λmax,

wherein at least one of the at least two dyes has an oxidation potential higher than 1.0 V versus SCE.

5. The black ink for inkjet recording according to claim 4, which further comprises a dye having a λmax of from 350 nm to 500 nm.

6. The black ink for inkjet recording according to claim 4 or 5, wherein at least one dye is a compound represented by formula (B1):

$$A_{41}-N=N-A_{42}-N=N=A_{43}$$

wherein A_{41}, A_{42} and A_{43} each independently represents an aromatic group or a heterocyclic group that may be substituted; A_{41} and A_{43} are monovalent groups; and A_{42} is a divalent group.

7. The black ink for inkjet recording according to any of claims 4 to 6, wherein at least one dye is a compound represented by formula (B2):

$$P-(N=N-Qx)y-N=N-R$$

wherein P, Q and R each represent an aromatic group that may be substituted; x is an integer of 1 or more; and y is an integer of 0 or more.

8. The black ink for inkjet recording according to claim 7, wherein Q in formula (B2) is a polycyclic aromatic ring.

9. The black ink for inkjet recording according to claim 5, wherein the dye having the λmax of from 350 nm to 500

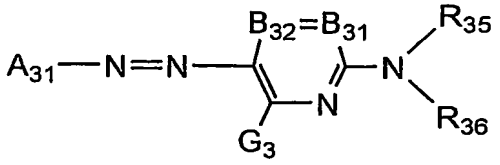
mm according to claim 6 is the compound represented by formula (B1).

10. A magenta ink for inkjet recording, which comprises: a first dye; and a second dye having a different structure from the first dye, the first dye and the second dye each independently having an oxidation potential higher than 1.0 V versus SCE,

wherein the first dye is an azo dye comprising an azo group, each end of the azo group having a hetero ring.

11. The magenta ink for inkjet recording according to claim 10, wherein the second dye is an anthrapyridone dye.

12. The magenta ink for inkjet recording according to claim 10 or 11, wherein the azo dye is a compound represented by formula (M1):



wherein

A_{31} represents a 5-membered heterocyclic ring;

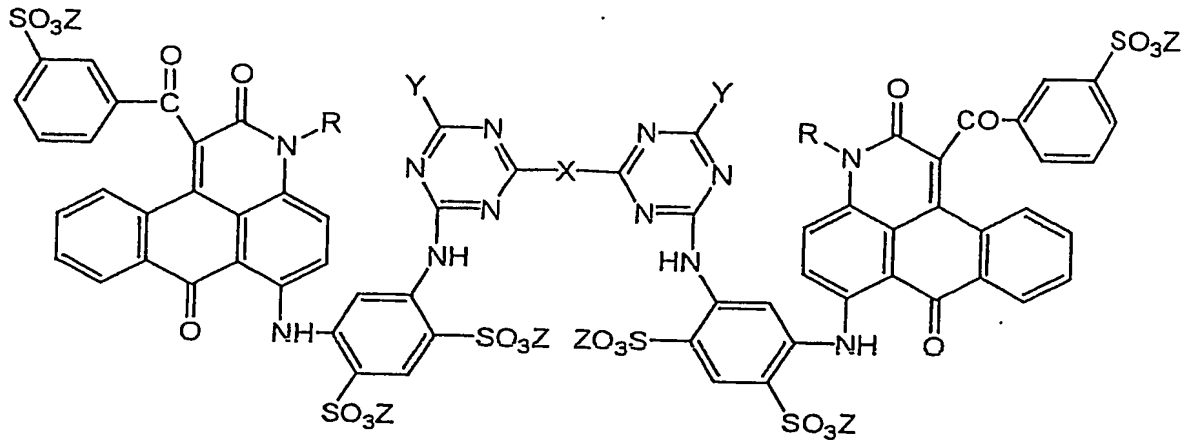
B_{31} and B_{32} each represents $=CR_{31}-$ or $-CR_{32}=$, or either one of B_{31} and B_{32} represents a nitrogen atom while the other one represents $=CR_{31}-$ or $-CR_{32}=$;

R_{35} and R_{36} each independently represents a hydrogen atom, an aliphatic group, an aromatic group, a heterocyclic group, an acyl group, an alkoxycarbonyl group, an aryloxycarbonyl group, a carbamoyl group, an alkylsulfonyl group, an arylsulfonyl group, or a sulfamoyl group, each of which may further have a substituent;

G_3, R_{31} and R_{32} each independently represents a hydrogen atom, a halogen atom, an aliphatic group, an aromatic group, a heterocyclic group, a cyano group, a carboxyl group, a carbamoyl group, an alkoxycarbonyl group, an aryloxycarbonyl group, a heterocyclic oxycarbonyl group, an acyl group, a hydroxy group, an alkoxy group, an aryloxy group, a heterocyclic oxy group, a silyloxy group, an acyloxy group, a carbamoyloxy group, an alkoxycarbonyloxy group, an aryloxycarbonyloxy group, an amino group, an arylamino group, a heterocyclic amino group, an acylamino group, an ureido group, a sulfamoylamino group, an alkoxycarbonylamino group, an aryloxycarbonylamino group, an alkylsulfonylamino group, an arylsulfonylamino group, a heterocyclic sulfonylamino group, a nitro group, an alkylthio group, an arylthio group, an alkylsulfonyl group, an arylsulfonyl group, a heterocyclic sulfonyl group, an alkylsulfinyl group, an aryl sulfinyl group, a heterocyclic sulfinyl group, a sulfamoyl group, a sulfo group or a heterocyclic thio group, each of which may be further substituted; and

R_{31} and R_{35}, or R_{35} and R_{36} may be bonded to form a 5- or 6-membered ring.

13. The magenta ink for inkjet recording according to claim 11 or 12, wherein the anthrapyridone dye is a compound represented by formula (M2):



wherein

R represents a hydrogen atom, an alkyl group, a hydroxy-lower alkyl group, a cyclohexyl group, a mono or dialkylaminoalkyl group, or a cyano-lower alkyl group;

Y represents: a chlorine atom; a hydroxyl group; an amino group; a mono or dialkylamino group in which the alkyl moiety may have a substituent selected from a sulfonic acid group, a carboxyl group and a hydroxyl group; an aralkylamino group; a cycloalkylamino group; an alkoxy group; a phenoxy group in which the benzene ring may have a substituent selected from a sulfonic acid group, a carboxyl group, an acetylamino group, an amino group and a hydroxyl group; an anilino group that may have one or two substituents selected from a sulfonic acid group and a carboxyl group; a naphthylamino group in which the naphthyl group

may be substituted with a sulfonic acid group; or a mono or dialkylaminoalkylamino group;

X represents a crosslinking group; and

Z represents a hydrogen atom, an alkali metal element, an alkaline earth metal element, an alkylamino group, an alkanolamino group, or an ammonium group.

14. An ink set for inkjet recording, which comprises at least one of an yellow ink according to any of claims 1 to 3, a black ink according to any of claims 4 to 9, and a magenta ink according to any of claims 10 to 13.

15. An ink set for inkjet recording, which comprises at least two magenta inks each independently comprising a dye having an oxidation potential higher than 1.0 V versus SCE, wherein

one magenta ink comprises an azo dye comprising: an azo group; and hetero rings bonding to both ends of the azo group, and

the other magenta ink comprises a dye having a structure other than the azo dye.

16. The ink set for inkjet recording according to claim 15, wherein at least one dye in the at least two magenta inks is a dye represented by formula (M1) according to claim 12 or

formula (M2) according to claim 13.

17. The ink set for inkjet recording according to claim 15 or 16, wherein at least one of the at least two magenta inks comprises a dye represented by formula (M1) according to claim 12.

18. The ink set for inkjet recording according to any of claims 15 to 17, wherein at least one of the at least two magenta inks comprises a dye represented by formula (M2) according to claim 13.

19. The ink set for inkjet recording according to any of claims 15 to 18, wherein at least one of the at least two magenta inks comprises: a dye represented by formula (M1) according to claim 12; and a dye represented by formula (M2) according to claim 13.